

U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
73544 Hwy 64  
Meeker, CO 81641

## ENVIRONMENTAL ASSESSMENT

**NUMBER:** CO-110-2004-189-EA

**CASEFILE/PROJECT NUMBER** (optional):

**PROJECT NAME:** Smith Gulch Reservoir 2 (0076) Feeder Ditch

**LEGAL DESCRIPTION:** T1N. R96W, Sec 1 NWSE

**APPLICANT:** Cross Slash Four Ranch (Victor Parker)

**ISSUES AND CONCERNS** (optional):

- The project is located within the Black Mountain Wilderness Study Area (WSA).

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

***Background/Introduction:*** Smith Gulch Reservoir 2 (range improvement #0076) was constructed by the Civilian Conservation Corp (CCC) in 1941 and is an earthen reservoir with no rock lining. Associated with the reservoir is an undocumented feeder ditch that directs water from snowmelt and rain runoff within the upland watershed into the reservoir. This feeder ditch runs for approximately 800 feet and is severely washed out/piped in three localities within the first 135 feet.

The BLM has authorized Cross Slash Four Ranch to clean out Smith Gulch Res. 2 (0076) as a maintenance action. However, to fix the feeder ditch would require earth moving by a piece of heavy equipment to effectively recreate the water flow pattern within the ditch, as it and the adjoining hillside have been washed/piped out considerably due to the erosive nature of the soils and position of the original ditch. Therefore, this action of fixing the feeder ditch is a more intensive form of maintenance and can not be considered general maintenance, thus requiring an Environmental Assessment.

The proposed action is located within a side drainage adjacent to Smith Gulch. The ecological site associated with this area is a rolling loam which has a vegetation community consisting of sagebrush, greasewood, and intermixed with varied perennial and annual grasses. The adjacent hillside adjoining the proposed action is rocky and devoid of appreciable vegetation beside pinion and juniper trees.

**Proposed Action:** To use a track-hoe to reconstruct and/or reroute the feeder ditch to Smith Gulch Res. 2 in order to collect water from snow melt and rain into the reservoir (see map). The proposed ditch reroute is approximately 290 feet long and 10 feet wide (0.067 acres) and contours more evenly with the landscape to lessen the potential for future blowouts. The ditch reroute itself would be small in nature, with an embankment of approximately 1-3 feet, a berm of 1-4 feet, and total width of approximately 10 feet. The timeframe for construction of the proposed action would be in the spring of 2005 (May-June) or as time and weather allows, which is largely dependent upon weather, soil conditions, and the water situation of Smith Gulch Res 2 as the proposed action would likely coincide with the maintenance action of cleaning this reservoir.

A track-hoe would be the piece of heavy equipment that would be able to create and rework the feeder ditch while providing the least amount of ground disturbance. This is due to the fact that the bucket of the track-hoe can easily be directed to disturb the ground directly where needed, particularly in comparison to the blade of a bull-dozer.

The rerouted feeder ditch would require the least amount of ground disturbance because it would bypass the blowouts and be positioned to avoid any advancement of the blowouts, then rejoin the existing ditch below the blowouts (see Alternatives Considered but not Carried Forward). The existing ditch below the reroute join in would require a minimal amount of work as its current state is functional and any work would be within the original disturbance level when the feeder ditch was originally constructed.

All disturbed soils will promptly be rehabilitated using a native grass seed mix to provide ground cover and competition with undesirable invasive and/or alien plant species such as cheatgrass (*Bromus tectorum*).

**No Action Alternative:** Do not reconstruct and/or reroute the feeder ditch to Smith Gulch Res 2.

**ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:** To reconstruct the existing feeder ditch with no ditch reroute (fix blowouts). There are 3 blowouts that are approximately 5-15 feet deep and have piped underground for approximately 35-85 feet. To fix these piped out areas would require the blowouts/piped areas to be completely dug out and then filled in with soil from the adjoining hillside. The amount of new surface disturbance (0.076 acres piped, 0.057 acres for fill dirt, thus a total of 0.133 acres disturbed) would be greater due to the fact it would require a large amount of fill dirt to place within the washed out localities. Also, land disturbance would be greater under this alternative than the proposed action in that it would require a greater amount of cubic yards of dirt removal and placement in addition to a greater surface area of disturbance. An accurate estimate of cubic yards of dirt disturbance would not be able to be determined until the track hoe digs out the blowout and piped areas to establish the extent of the underground piping. Since the amount of surface disturbance and soil moving would be greater to properly reconstruct the existing blowout/piped ditch than the proposed action, this alternative is not being carried forward.

**NEED FOR THE ACTION:** To regain the full functionality of Smith Gulch Res. 2 by collecting a greater amount of water within the upland watershed by use of a fully operable feeder ditch to transport/direct water into the reservoir. Storing the water for a longer period of time during the authorized grazing period would increase cattle distribution. This reservoir functions as the primary water source within the northern portion of the Lower Smith Gulch Allotment (06621). A historic consequence of this reservoir running dry is that cattle then must congregate along the southern portion of the allotment to water at the White River. Next to the White River runs highway 64, and having increased cattle along this highway puts an abnormal amount of pressure along the highway-right-of-way fence, thereby cattle gain access through the fence onto the highway, which creates a human safety situation with motorist.

**PLAN CONFORMANCE REVIEW:** The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: 2-23

Decision Language: Identification of range improvements to enhance rangeland productivity and management.

**AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES /  
MITIGATION MEASURES:**

**STANDARDS FOR PUBLIC LAND HEALTH:** In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

**CRITICAL ELEMENTS**

**CULTURAL RESOURCES**

*Affected Environment:* The proposed action calls for a “walk-in.” of a trackhoe up an existing road to the reservoir. The road that is closed to motorized traffic has been inventoried at the Class III (100% pedestrian) level with no new cultural resources identified in the inventory area. The reroute of the feeder ditch area has been inventoried at a Class III level with no cultural

resources identified in the inventory area. There are no recorded sites in the road or feeder ditch area.

*Environmental Consequences of the Proposed Action:* The proposed action will not impact any known cultural resources.

*Environmental Consequences of the No Action Alternative:* There would be no new impacts to cultural resources under the No Action Alternative

*Mitigation:* 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

## **INVASIVE, NON-NATIVE SPECIES**

*Affected Environment:* The proposed action is located within a Rolling Loam ecological site and has been partially invaded by cheatgrass within the drainage bottom of Smith Gulch.

*Environmental Consequences of the Proposed Action:* The proposed action will have a minimal affect on the ability of invasive, non-native species to expand due to the limited amount of new surface disturbance and rehabilitation efforts. With successful rehabilitation, the seeded

native species will provide a competitive interaction with cheatgrass for establishment and dominance of disturbed soils.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* None

## **MIGRATORY BIRDS**

*Affected Environment:* A number of migratory birds fulfill nesting functions in the project area's basin big sagebrush-greasewood bottomlands during the months of May, June, and July. The more common species associated with these shrubland communities are typical and widely represented in the Resource Area and region (e.g., blue-gray gnatcatcher, Say's phoebe, spotted towhee). Although few species associated with this community are identified as having higher conservation interest by the Rocky Mountain Bird Observatory/Partners in Flight program (i.e., green-tailed towhee), these birds are well distributed throughout Piceance Basin and northwest Colorado in extensive suitable habitats.

*Environmental Consequences of the Proposed Action:* These rank shrubland habitats, particularly those with depauperate herbaceous understories, support low breeding bird densities. It is anticipated that if this proposal were to implemented during the nesting season, up to 0.1 acre of potential nest habitat would be cleared and heavy equipment operation may disrupt nesting attempts on up to 1 additional acre of nest habitat in the immediate vicinity of the ditch. This project would be unlikely to disrupt nesting activity of more than 2 nesting pair of migratory birds with a low probability of involving species with higher conservation interest. In the context of breeding bird population viability, this level of impact is considered discountable and insufficient to require the application of timing limitations.

*Environmental Consequences of the No Action Alternative:* Failing to implement the project would have no influence on migratory bird nesting activity.

*Mitigation:* None.

## **THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)**

*Affected Environment:* There are no animals known to inhabit or derive important benefit from the project area that are listed, proposed, or petitioned under the Endangered Species Act, listed by the BLM as sensitive, or considered of special concern by the State of Colorado.

*Environmental Consequences of the Proposed Action:* The proposed action would have no conceivable influence on Threatened and Endangered animals or those considered sensitive by the BLM or State of Colorado.

*Environmental Consequences of the No Action Alternative:* The no-action alternative would have no conceivable influence on special status animals.

*Mitigation:* None.

*Finding on the Public Land Health Standard for Threatened & Endangered species:* The proposed and no action alternatives would have no effective influence on populations or habitat associated with special status species. Repairing and stabilizing an active erosion source in the Smith Gulch valley would be consistent with the long term maintenance of animal and plant land health standards.

## **WASTES, HAZARDOUS OR SOLID**

*Affected Environment:* Hazardous or solid wastes are not expected to be a part of the affected environment. However, these materials may accidentally be introduced in the environment through the implementation of the proposed action. Fuel, oil, grease, and antifreeze are all associated with vehicles and fire suppression equipment associated with implementing the proposed action and would only be introduced into the environment because of equipment failure. Minute loss of these materials through normal operation of equipment, maintenance and fueling procedures are not considered spills. Spills are generally defined as the loss of large quantities of these materials into the environment and are determined to be a spill on a case-by-case basis.

*Environmental Consequences of the Proposed Action:* For any given accident or incident involving hazardous materials, consequences will be dependent on the volume and nature of the incident and material released. Short term impacts such as contaminations of soils, vegetation, and surface water could occur.

*Environmental Consequences of the No Action Alternative:* No hazardous wastes would be introduced into the environment under the no action alternative.

*Mitigation:* The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

## **WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)**

*Affected Environment:* The proposed action is in an un-named tributary to Smith Gulch which is tributary to the White River. This drainage is an ephemeral stream, flowing in direct response to snowmelt and rainstorms. Spring runoff generally occurs from mid March through early May. Impairment to water quality arises when the watershed does not have the vegetation present to protect itself from raindrop impact. Soil erosion and sedimentation is a major water quality problem within the White River watershed. It is an ongoing process affected by many factors, including past and present land use, existing geology, and regional climate. The geologic parent material often determines the general nature of a watershed. The soft shale of

sedimentary rocks and harsh climate of the watershed, combined with frequent intense thunderstorms, rapid snowmelt, and long dry periods, produce a distinctive and fragile land form characteristic of a semiarid environment.

Water quality standards and guidance for drainages within the Lower Colorado River Basin are included in CDPHE-WQCC Regulation No. 37 (2004a). This segment of river is in segment 9, which is all tributaries to the White River, including all wetlands, lakes and reservoirs, from the confluence of North and South Forks to a point immediately above the confluence with Piceance Creek. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. The State has classified this segment as a "Use Protected" reach. Its designated beneficial uses are: Aquatic Life 1, Recreation 2, Water supply and Agriculture. The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. The state has defined these water quality parameters with table values. These standards reflect the ambient water quality and define maximum allowable concentrations for the various water quality parameters.

*Environmental Consequences of the Proposed Action:* Fixing the blown out areas of the existing ditch would disturb a larger amount of area exposing a larger amount of soils to erosion and suspended sedimentation. As evident from the piping, the original location of the ditch was also high in salts which dissolved readily in water leaving voids that were even more erosive. The location of the proposed ditch is higher on the hillside where the soils should be less erosive. It is difficult to predict the amount of erosion that could or could not occur because runoff is dynamic and dependent on climatic conditions as well as the amount of vegetation retained for watershed protection and vegetation density.

As with any surface disturbing activity, impacts to water quality from the proposed action would be an increase in sediment transport to waterways until a protective vegetation cover has been restored or successful best management practices (BMPs) have been implemented. The magnitude of these impacts would be dependent on the amount of surface disturbance and climatic conditions during the time the soils are exposed to the elements.

*Environmental Consequences of the No Action Alternative:* Additional impacts from the no-action alternative are not anticipated aside from what has been described in the proposed action.

*Mitigation:* None

*Finding on the Public Land Health Standard for water quality:* Water quality of the area currently meets the state standards and would continue to do so as a result of the proposed action.

## **WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)**

*Affected Environment:* The proposed action is separated from riparian communities associated with the upper White River by over 3 miles of deeply incised ephemeral channel that bear no riparian character.

*Environmental Consequences of the Proposed Action:* The existing segment of damaged ditch is considered irreparable. This segment would be circumvented by the new ditch since attempts to repair and/or reclaim the damaged section would involve an extraordinary amount of dirt work that would, in turn, be vulnerable to further erosion. Erosional processes associated with these points are considered mature and the relatively small amount of sediment produced from these points would persist until natural rejuvenation stabilizes the site in the long term. Although excessive sediment is capable of destabilizing stream systems, the quantity of sediment delivered to the upper White River from the damaged ditch work would be immeasurably small relative to background sediment loads. Improved livestock distribution attributable to water development may be expected to moderate heavy grazing use at the mouth of Smith Gulch and allow for improved herbaceous expression in the lower channel. This effect may help capture and incorporate sediments originating from Smith Gulch, conceivably in excess of that produced by the damaged ditch. Overall, this project would have no further influence on the White River's riverine riparian function or character.

*Environmental Consequences of the No Action Alternative:* Sediments produced from the damaged ditch would persist in the manner described in the Proposed Action. Failure to develop this project would eliminate the opportunity to reduce livestock grazing pressure at the mouth of Smith Gulch. Sediment capture associated with improved channel vegetation (also see Proposed Action) would be foregone. This alternative would essentially maintain the status-quo and its selection would have no apparent consequence on the White River's riparian and channel function or character.

*Mitigation:* None.

*Finding on the Public Land Health Standard for riparian systems:* The upper White River's riparian community is almost entirely in private ownership. This project would have no discernible influence on sediment discharge in the river, nor have any consequence on channel function or character. Neither alternative would any conceivable effect on the Public Land Health Standards as applied to downstream BLM-administered stream segments.

## **WILDERNESS**

*Affected Environment:* The proposed action occurs in the Smith Gulch drainage in the Black Mountain Wilderness Study Area. The BLM analyzes potential actions within WSAs based on the "nonimpairment" standard which is defined in BLM handbook H-8550-1, Interim Management Policy for Lands Under Wilderness Review as activities (except as listed under "Exceptions" in Section I.B.2., such as grandfathered and valid existing rights) permitted in WSAs must be temporary uses that create no surface disturbance, nor involve permanent placement of structures. The nonimpairment criteria are as follows: 1) the use, facility, or activity must be temporary. This means a temporary use that does not create surface disturbance or



involve permanent placement of facilities may be allowed if such use can easily and immediately be terminated upon wilderness designation. 2) When the use, activity, or facility is terminated, the wilderness values must not have been degraded so far as to significantly constrain the Congress's prerogative regarding the area's suitability for preservation as wilderness. Further, new, permanent livestock developments may be approved if, they truly enhance wilderness values, and the developments are substantially unnoticeable. New, permanent developments must not require motorized access if the area were designated as wilderness. (This requirement must be noted in the case file, in the stipulations, and the grazing permit.). An overriding consideration that the preservation of wilderness values within a WSA is paramount and should be the primary consideration when evaluating any proposed action or use that may conflict with or be adverse to those wilderness values. Furthermore, “grandfathered” existing uses must have been occurring in the WSA prior to passage of the Federal Land Management and Policy Act of October 21, 1976. The concept of considering wilderness values first asserts, with few exceptions (e.g., valid existing rights, grandfathered rights, etc.), that wilderness resource management objectives within a WSA should take precedence over all other resource management program objectives. In other words, the wilderness resource will be dominant in all management decisions where a choice must be made between preservation of wilderness suitability and other competing uses.

*Environmental Consequences of the Proposed Action:* The feeder ditch would be a new surface disturbing activity, would not enhance any wilderness values and would be substantially noticeable in the short-term. However, over time the proposed project would become substantially unnoticeable due to natural revegetation efforts as shown with the nearby pond and abandoned access road, which are essentially unnoticeable. Further, the “existing” ditch did not exist prior to the passage of FLMPA and therefore does not qualify as a “grandfathered” use. This can be ascertained by reviewing the Job Inspection and Maintenance Schedule dated 12 September 1977 (see Figure 2 below) which states that “a collection ditch needs to be constructed.” If a ditch needed to be constructed in 1977 one can be reasonably certain that no ditch existed prior to the passage of FLPMA.

*Environmental Consequences of the No Action Alternative:* None.

*Mitigation:* None.

#### **CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:**

No ACEC’s, flood plains, prime and unique farmlands, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Air Quality, Native American religious or environmental justice concerns associated with the proposed action.

## **NON-CRITICAL ELEMENTS**

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

### **SOILS** (includes a finding on Standard 1)

*Affected Environment:* The proposed action is located in a Patent Loam, 3 to 8 percent slopes as identified by the Rio Blanco County Soil Survey. These soils are deep, well drained, and located on fans and/or toe slopes. Typically, the surface layer is a brown loam and 3 inches thick and the soils are calcareous throughout, and it contains varying amounts of gypsum. Permeability of this patent soil is moderate and available water capacity is high. Runoff is medium and has a moderate hazard for water erosion.

Where the existing ditch crosses soils that are grayish in color, they are considered to be Badlands. The Badland soil type is very difficult to manage. Vegetation is very sparse low desert shrubs and grasses. This soil type is very shallow and exhibits no significant soil characteristics. The soil material consists of residuum gypsiferous shale and bentonite. Runoff from these areas can be very rapid, and the hazard of water erosion, very high, which results in a large amount of sedimentation during rainstorms and when snow melts. Underground and/or surface erosion in the form of piping and incised washes are prevalent within the area and several locations of the previously constructed feeder ditch have been eroded away.

*Environmental Consequences of the Proposed Action:* The proposed action would disturb a small segment of soil (0.067 acres) during construction of the feeder ditch. The soils taken from the ditch itself would be placed adjacent to the ditch, thereby creating a small berm (1-4 ft). All disturbances would be within the top soil horizons, which would provide a soil bed for rehabilitation using a native seed mix. With successful rehabilitation, the established vegetation would provide a means for increase soil stability with greater ground cover of desirable plant species and increase root mass within the soils.

The proposed action calls for the existing feeder ditch to be rerouted in a more even contour manner with the adjoining landscape to lessen the potential for future piping and/or blowouts of the ditch. By having the rerouted feeder ditch contour more steadily with the adjoining slope, it would lessen the velocity of the flowing water, thereby reducing the ability of the water to undercut the ditch which leads to excessive erosion of the soils.

*Environmental Consequences of the No Action Alternative:* The current piped out areas of the ditch would continue to divert water through eroded areas into a large wash. Thereby, these eroded areas would continue to expand upslope until encountering an impermeable barrier. However, the ability for advancement upslope is limited due to the close position of the blowouts to the hillside and impermeable barrier, i.e. rock.

*Mitigation:* None.

*Finding on the Public Land Health Standard for upland soils:* Within the vicinity of the proposed action, there are incised washes with active piping/headcutting of drainages. These soils are naturally erosive, however the current level of soil movement and bank stabilities are beyond natural influences, therefore a portion of the area are not meeting health standards for soils. However, the proposed action will not negatively affect the sites ability to meet these standards due to the small nature of the action. A positive benefit that is small in nature would be received by having the rerouted feeder ditch contour more steadily with the adjoining slope; it would lessen the velocity of the flowing water, thereby reducing the ability of the water to undercut the ditch which leads to excessive erosion of the soils. Also, a small benefit for health standards would be received by diverting water out of the current piped/eroded areas that would continue to expand upslope if unchecked until encountering an impermeable barrier.

## **VEGETATION (includes a finding on Standard 3)**

*Affected Environment:* The proposed action is located within a Rolling Loam ecological site within a side drainage of Smith Gulch. Vegetation associated with this ecological site has an overstory dominated by big sagebrush, Douglas rabbitbrush, and intermixed with greasewood. The understory consists of western wheatgrass, needle-and-thread, Sandberg bluegrass, and squirreltail bottlebrush. This particular site has been partially invaded by the alien species of cheatgrass, which is an undesirable annual grass.

*Environmental Consequences of the Proposed Action:* A small segment (0.067 acres) of the Rolling Loam ecological site will be temporarily disturbed and taken out of production. However, under the proposed action the site will be promptly rehabilitated with a native seed mix. This seed mix will provide for plant species that will interact and compete with invasive cheatgrass for reestablishment. With successful revegetation, the rehabilitated site will provide a greater component of native grass species than the adjoining rangelands.

A feeder ditch would regain the full functionality of Smith Gulch Res. 2 (0076) by collecting a greater amount of water within the upland watershed by use of a fully operable feeder ditch to transport/direct water into the reservoir, storing water for a longer period during the authorized grazing period for increase cattle distribution. This reservoir functions as the primary water source within the northern portion of the Lower Smith Gulch Allotment. A historic consequence of this reservoir running dry is that cattle then must congregate along the southern portion of the allotment to water at the White River, therefore leading to increased utilization rates of key forage species by livestock.

Therefore, the feeder ditch would provide a means for greater water storage which would result in increase distribution of cattle that would spread out the livestock and associated utilization rates of grazing. Increase distribution of livestock would help in meeting the Public Land Health Standards for plant communities by lessening the concentrated use by livestock.

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* Rehabilitate disturbed soils using Native Seed Mix #2 or a portion of this mix.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Current conditions of the site are marginal and have a component of cheatgrass (invasive). Due to the small nature of the proposed action (0.067 acres) and mandating revegetation using native species, the action will not adversely affect meeting Public Land Health Standards for plant communities. A positive benefit that would be small in nature would be received with the establishment of native species within the site.

### **WILDLIFE, AQUATIC** (includes a finding on Standard 3)

*Affected Environment:* The proposed action is separated from aquatic communities associated with the upper White River by over 3 miles of deeply incised ephemeral channel that retains no semblance of riparian character.

*Environmental Consequences of the Proposed Action:* See discussion in “Wetlands and Riparian Zones” section. The relatively small amount of sediment produced from these erosion features would have no conceivable affect on aquatic habitat conditions in the White River.

*Environmental Consequences of the No Action Alternative:* Same as the Proposed Action. See discussion in “Wetlands and Riparian Zones” section.

*Mitigation:* None.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Terrestrial): The upper White River is almost entirely privately owned. This project would have no discernible influence on sediment discharge to these upper river reaches, no consequence on channel function or character, and consequently, no effect on the Public Land Health Standards as applied to downstream BLM-administered stream segments.

### **WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

*Affected Environment:* The project area is associated with general deer winter ranges that are occupied primarily during the later fall through midwinter months and again during the early to middle spring period. Current big game forage opportunity in this drainage is limited by the nature and condition of vegetation communities. Predominant woody shrub growth (basin big sagebrush and greasewood) possess little, if any, big game forage value and sparse understories provide little herbaceous production in the fall and spring. Cheatgrass is prominent component beneath these shrubland canopies. Although cheatgrass is readily consumed by deer in the early spring months, its monotypic, ephemeral character is antithetical with efforts to enhance the diversity, persistence, and availability of quality herbaceous forage and cover for all wildlife use and ground cover resistant to erosion.

There are no raptor nests delineated in surrounding cliff or woodland habitats. Surrounding pinyon-juniper woodlands likely sustain undocumented woodland raptor nest activity, including Cooper's and sharp-shinned hawk. Due to the nature of this project (i.e., confined to small area in valley proper), raptor inventories are not considered necessary. Nesting records for potentially affected raptors indicate that nest attempts (initiated as early as March) are largely (85%) complete and young fledged by early August.

Small mammal populations are poorly documented; however, the 6 or so species that are likely to occur in these bottomlands are widely distributed throughout the Resource Area, northwest Colorado and the Great Basin region. Although poorly developed understories likely suppress the abundance of most species and perhaps the presence of those species that prefer shrubland with well-developed understories (e.g., voles), all resident species are widely distributed and display broad ecological tolerance. No narrowly distributed or highly specialized species or sub specific populations are known to occur in the project area.

*Environmental Consequences of the Proposed Action:* Project activity in the spring or early summer would be outside the period of big game occupation. Removal of existing sagebrush cover would not represent a reduction in the winter forage base. Improved livestock distribution in the Smith Gulch valley would result in modest gains in the availability of herbaceous forage for big game during the spring and fall months. Long term improvements in ground cover characteristics should enhance herbaceous forage (seed and herbage production) and cover (increased density and residual ground cover) properties for resident nongame birds and mammals and likely allow for minor expansions in both animal abundance and distribution.

Short term and localized equipment use on the valley floor would have no realistic potential of adversely influence raptor nesting activity in surrounding woodlands. Modifying the adjacent bottomlands would have virtually no influence on the character or utility of adjacent nest territories.

*Environmental Consequences of the No Action Alternative:* The project area would continue to provide a limited spring forage base for big game, well below its productive potential and insignificant with respect to the abundance and distribution of cheatgrass on these ranges. An opportunity to promote long term improvements in the composition and density of herbaceous ground cover in Smith Gulch, as forage and cover base for game and nongame wildlife would be foregone.

*Mitigation:* None

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Aquatic): On a landscape basis, the project vicinity meets the land health standard for most terrestrial vertebrates, although the depauperate nature of herbaceous understories undoubtedly limits the potential abundance of nongame birds and mammals that inhabit these bottomlands. Implementing the proposed action would help moderate excessive use at the mouth of Smith Gulch, better serving the land health standards (i.e., improved composition and density of herbaceous ground cover, enhanced forage and cover capacity for game and nongame animals). The no-action alternative would maintain current land health conditions.

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation		X	
Cadastral Survey	X		
Fire Management	X		
Forest Management	X		
Geology and Minerals		X	
Hydrology/Water Rights	X		
Law Enforcement		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations	X		
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

## PALEONTOLOGY

*Affected Environment:* The project area is generally mapped as part of the Lower Green River Formation, Douglas Creek Member (Tweto 1979) which the BLM has classified as a Category II formation meaning the formations fossil bearing potential is not well understood in the area. Specifically, field examination indicates that the entire project is located in a drainage bottom which contains quaternary alluvium and colluvium, which is not considered to be likely to produce scientifically important fossils.

*Environmental Consequences of the Proposed Action:* The propose action does not appear likely to impact scientifically important fossil resources.

*Environmental Consequences of the No Action Alternative:* There would be no new impacts to fossil resources under the No Action Alternative.

*Mitigation:* If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

## RANGELAND MANAGEMENT

*Affected Environment:* The proposed action is located within the Lower Smith Gulch grazing allotment (06621) and is authorized for cattle use during the winter and spring periods. Cross Slash Four Ranch is the permitted grazing permittee, who typically rest the allotment during the winter period and grazes the allotment during the spring. The allotment is utilized by the permittee for use by cattle after the winter feeding and early spring period when cattle are on private fields along the White River.

*Environmental Consequences of the Proposed Action:* The feeder ditch would regain the full functionality of Smith Gulch Reservoir 2 (0076) by collecting a greater amount of water within the upland watershed by use of a fully operable feeder ditch to transport/direct water into the reservoir. Therefore, the reservoir would store water for a longer period during the authorized grazing period for increase cattle distribution. This reservoir functions as the primary water source within the northern portion of the Lower Smith Gulch Allotment. A historic consequence of this reservoir running dry is that cattle then must congregate along the southern portion of the allotment to water at the White River. Next to the White River runs highway 64, and having increased cattle along this highway puts an abnormal amount of pressure along the highway-right-of-way fence, thereby cattle gain access through the fence onto the highway, which creates a human safety situation with motorist.

Therefore, the feeder ditch would provide a means for greater water storage which would result in increase distribution of cattle that would spread out the livestock and associated utilization rates of grazing. An increase distribution of cattle would lead to less cattle congregating along the highway-right-of-way fence along highway 64, thereby lessening the opportunity of livestock along the highway. In an effort to keep cattle off the highway, the BLM and the grazing permittee are in the process of implementing other alternatives in addition of the proposed action.

Also, increase distribution of cattle would also help in meeting the Standards for Rangeland Health for plant communities by limiting the concentrated use in the southern portion of the allotment that have led to heavy utilization rates. A reduction of this concentrated use would give the grasses an opportunity for growth and seed production, thereby helping to achieve proper propagation for sustained plant communities.

*Environmental Consequences of the No Action Alternative:* An opportunity would be lost for re-achieving the full functionality of Smith Gulch Res. 2 that provides a primary water source within the northern portion of the Lower Smith Gulch allotment. Therefore, cattle would continue to concentrate along the southern portion of the allotment once the reservoir went dry and congregate along highway 64 at the White River. Also, an environmental consequence of the reservoir going dry prematurely would be a continue lack of proper distribution of cattle within the allotment that leads to high utilization rates of key forage species by livestock.

*Mitigation:* None

## RECREATION

*Affected Environment:* The proposed action occurs within the Black Mountain Wilderness Study Area (WSA). BLM manages the WSA to provide for unstructured, wilderness dependent primitive and unconfined recreation activities such as hunting, dispersed camping, hiking, horseback riding, photography and wildlife viewing. However, the opportunities are not considered outstanding by the BLM (USDI BLM, Craig District Study Areas, Wilderness Study Report, 1991).

Visitor use is near non-existent with the exception of fall big-game hunting seasons from September to November and is very low even during that period.

*Environmental Consequences of the Proposed Action:* If action coincides with hunting seasons (August through November) it will most likely disrupt the experience sought by those recreationists. After the construction period is complete, no impact to recreation will occur.

*Environmental Consequences of the No Action Alternative:* None.

*Mitigation:* Avoid construction during the months of August through November.

## VISUAL RESOURCES

*Affected Environment:* The proposed project is located in a Visual Resource Management (VRM) class I area. The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

*Environmental Consequences of the Proposed Action:* The proposed action is approximately 2 tenths of a mile west of BLM trail 1711. At present the pond and associated route leading to it are essentially unnoticeable. Although vegetation such as sage surrounds a portion of the proposed feeder ditch, much of the construction will take place on areas that have little vegetation and soils tend to be light brownish-grey to light brown-oranges in color. A significant color contrast should occur. In addition, a linear feature will be created by the construction of the ditch and the ten foot wide disturbance and will create a feature that will be noticeable to a casual viewer. However, the ditch may revegetate over time and in that time the ditch, like the existing pond, may be substantially unnoticeable. Class I VRM objectives will not be to be met in the short term (10 years) but may be met if revegetation occurs.

*Environmental Consequences of the No Action Alternative:* None.

*Mitigation:* The BLM Authorized Officer will be notified before construction begins to assure a VRM specialist is on site during construction.



**CUMULATIVE IMPACTS SUMMARY:** This project would aid in regaining the full functionality of Smith Gulch Res. 2 by collecting a greater amount of water within the upland watershed by use of a fully operable feeder ditch to transport/direct water into the reservoir. This reservoir functions as the primary water source within the northern portion of the Lower Smith Gulch Allotment (06621). A historic consequence of this reservoir running dry is that cattle then must congregate along the southern portion of the allotment to water at the White River. Next to the White River runs highway 64, and having increased cattle along this highway puts an abnormal amount of pressure along the highway-right-of-way fence, thereby cattle gain access through the fence onto the highway, which creates a human safety situation with motorists.

Therefore, a fully functional reservoir and associated feeder ditch would aid in the distribution of authorized cattle, which would reduce pressure by cattle along the highway-right-of-way fence, and lead to a more even utilization pattern by livestock.

Other impacts, such as removal of vegetation and impacts from the construction equipment are not cumulative because these impacts are temporary, and those from previous projects no longer exist.

**PERSONS / AGENCIES CONSULTED:**

- BLM Colorado State Office
  - Social & Cultural Resources, Dave Strunk
  - Natural Resource Specialist, Eric Finstick (Wilderness Coordinator)

**INTERDISCIPLINARY REVIEW:**

<b>Name</b>	<b>Title</b>	<b>Area of Responsibility</b>
Caroline Hollowed	Planning & Environmental Coordinator	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Gabrielle Elliott	Archaeologist	Cultural Resources Paleontological Resources
Jed Carling	Rangeland Specialist	Invasive, Non-Native Species
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Caroline Hollowed	Planning & Environmental Coordinator	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Jed Carling	Rangeland Specialist	Soils
Jed Carling	Rangeland Specialist	Vegetation
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Jed Carling	Rangeland Specialist	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Chris Ham	Outdoor Recreation Planner	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

## **Finding of No Significant Impact/Decision Record (FONSI/DR)**

### **CO-110-2004-189-EA**

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE:** The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

**DECISION/RATIONALE:** After thorough review of the Environmental Assessment (CO-WRFO-04-189-EA), I have decided to disapprove the proposal to allow a feeder ditch to be constructed within the Black Mountain Wilderness Study Area (T1NR96W Section 1 6<sup>th</sup> PM).

**RATIONALE:** Our records show the proposed feeder ditch was not an “existing” feature prior to the passage of Federal Land Management Policy Act of 1976 (FLPMA) and therefore cannot be considered a “grandfathered” facility to maintain. To be an "existing" use or facility, the use or facility clearly must have been taking place on the lands as of the date of approval of FLPMA, October 21, 1976. (see H-8550-1, Interim Management Policy for Lands under Wilderness Review (IMP) Chapter I, B.7). However, new grazing facilities, such as ponds or ditches are not "grandfathered" (see H-8550-1, IMP Chapter I, B.8).

Additionally, the proposed feeder ditch would conflict with the guidance provided by the IMP which describes general policy to manage Wilderness Study Areas (WSA). The nonimpairment policy directs that the BLM will review all proposals for uses and/or facilities within WSAs to determine whether the proposal meets the criteria below. Uses and/or facilities found to be nonimpairing may be permitted on lands under wilderness review. Uses and/or facilities found to be impairing will be denied. The following statement is referred to as one of the nonimpairment criteria (see H-8550-1, IMP Chapter I, B.2a):

The use, facility, or activity must be temporary. This means a temporary use that does not create surface disturbance or involve permanent placement of facilities may be allowed if such use can easily and immediately be terminated upon wilderness designation.

"Temporary" means the use or facility may continue until the date of wilderness designation, at which time the use must cease and/or the facility must be removed.

"Surface disturbance" is any new disruption of the soil or vegetation which would necessitate reclamation. Decisions to allow or deny proposed actions based on the nonimpairment criteria will be included in appropriate decision documents.

By constructing a new feeder ditch, a new surface disturbance will occur and a permanent structure will be constructed that is not easily and immediately terminated upon wilderness designation.

The White River BLM staff took a hard look at the proposed feeder ditch construction and found no practical way to mitigate the impact to wilderness values and meet the IMP requirements at this location.

**APPEAL OPPORTUNITIES:** Within 30 days of receipt of this decision, you have the right of appeal to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR 4.400. Appeal and stay procedures are outlined in the enclosed Form CO-050-1840-191.

**MITIGATION MEASURES:**

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

3. Rehabilitate disturbed soils using Native Seed Mix #2 or a portion of this mix.
4. If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.
5. Avoid construction during the months of August through November.
6. The BLM Authorized Officer will be notified before construction begins to assure a VRM specialist is on site during construction.

**COMPLIANCE/MONITORING:** N/A

**NAME OF PREPARER:** Jed Carling

**NAME OF ENVIRONMENTAL COORDINATOR:** Carol Hollowed

**SIGNATURE OF AUTHORIZED OFFICIAL:**   
Field Manager

**DATE SIGNED:** 12/03/04

**ATTACHMENTS:** Figure 1: Map of Smith Gulch Reservoir 2 (0076) Feeder Ditch  
Figure 2: Job Inspection and Maintenance Schedule  
Location map of the proposed action

Figure 1: Map of Smith Gulch Reservoir 2 (0076) Feeder Ditch

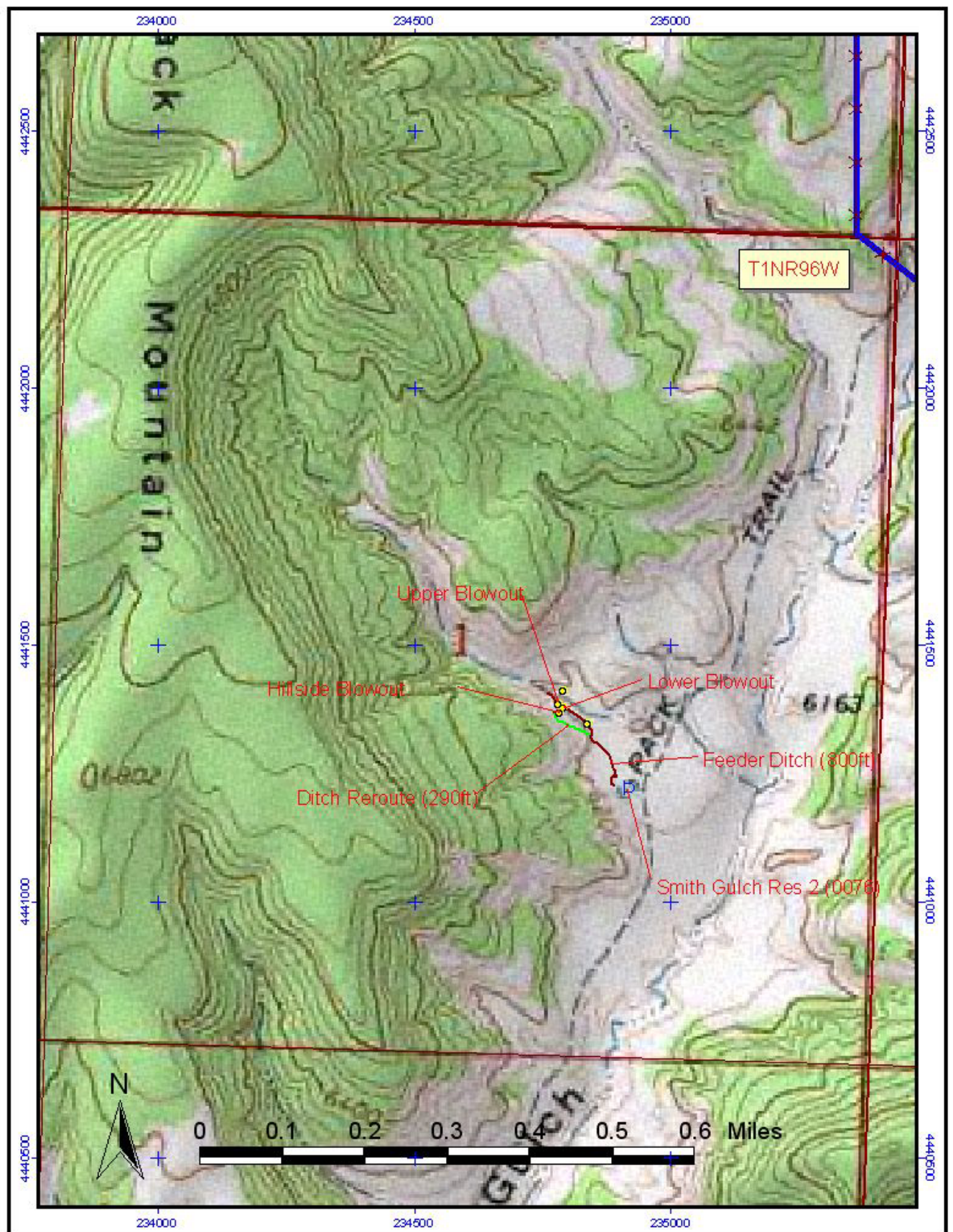




Figure 2: Job Inspection and Maintenance Schedule

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT				Job Number <b>0026</b>
JOB INSPECTION RECORD AND MAINTENANCE SCHEDULE				Maintenance responsibility —
1. State <b>CO</b>	2. District <b>01</b>	3. Planning Unit <b>06</b>	4. Job Name <b>Smith Gulch Reservoir #2</b>	
5. Location <b>T.1N, R.96W, Sec. 1, 1/4 Sec SE</b>			6. Type of improvement <b>reservoir</b>	
7a. Last inspection (date) <b>22 Aug 77</b>			b. Condition or success of improvement <input type="checkbox"/> good <input checked="" type="checkbox"/> fair <input type="checkbox"/> poor <input type="checkbox"/> failure	
c. Apparent reasons for failure or success. <b>The reservoir is silted in most of its capacity and doesn't have enough drainage to fill it.</b>				
8a. Recommended action <input type="checkbox"/> Normal maintenance <input type="checkbox"/> Reconstruction <input type="checkbox"/> Salvage or other use <input type="checkbox"/> Abandon <input checked="" type="checkbox"/> Other				
b. Describe needed repairs or treatment <b>The dam needs to be dug out and a collection ditch constructed.</b>				
c. Estimated cost of maintenance needs \$			d. Last maintenance completed (date)	
9a. Fiscal year work programmed			b. Next inspection (date)	
Remarks (include recommendation on remedial management practices, etc., and support with photographs)				
Signature of Inspector <b>Ray A. Wilby</b>			Title <b>Range Conservationist</b>	
			Date <b>9-12-77</b>	

INSTRUCTIONS — District Office prepares one copy. File in District maintenance inventory file.

Form 7120-3 (Sept. 1971) (former: 7120-5)  
GPO 607-710

# Location of Proposed Action CO-110-2004-189-EA

